U.S. Department of the Interior Bureau of Land Management

CAMEL TRACKS ROAD REHABILITATION AND FENCING PROJECT

Finding of No Significant Impact and Decision Record

Attachment: Environmental Assessment DOI-BLM-NM-F020-2010-0048-EA

U.S. Department of the Interior Bureau of Land Management Taos Field Office 226 Cruz Alta Road Taos, New Mexico 87571 575-758-8851



FINDING OF NO SIGNIFICANT IMPACT

Camel Tracks Road Rehabilitation and Fencing Project DOI-BLM-NM-F020-2010-0048-EA

criteria in 40 CFR 1508.27, I have determined	0-2010-0048-EA, and considering the significance
Authorized Officer	Date

DECISION RECORD

Camel Tracks Road Rehabilitation and Fencing Project DOI-BLM-NM-F020-2010-0048-EA

Decision

It is my decision to implement Alternative A, the Proposed Action, as described in the attached environmental assessment (EA). The Proposed Action includes upgrading approximately 3.3 miles of road to BLM standards to alleviate the multiple problems and resource impacts associated with the current road condition. This action would adequately meet the purpose and need for project as presented under section 1.2 of the EA.

One exception to implementing the Proposed Action as described in the EA is the fencing component. Instead of fencing the 3.3 miles adjacent to the upgraded road, it is my decision to only fence the first 0.7 miles of the road included in Phase I of the Proposed Action. Limiting fencing to this section of road would prevent any affect to the management of Grazing Allotment 544, which is transected by the portion of road included in Phase II (the 2.6 miles of road included in Phase II begins at the allotment boundary, marked by a catteguard). See **Figure 1** for an illustration of the Proposed Action as selected in this decision.

If in the future the BLM determines that fencing the road alignment associated with Phase II is necessary to alleviate further illegal dumping or to protect resources, then a separate environmental analysis would be prepared to consider potential impacts to the affected livestock grazing allotments. The analysis, if necessary, would consider any necessary changes to the management of the allotment regarding water resources for livestock, the movement of livestock from one portion of the allotments to another, and other considerations.

Land Use Plan Conformance

As discussed in section 1.4, the Proposed Action would be in conformance with the 1988 Taos Resource Management Plan (RMP), as amended, which states that the "transportation and access program is to provide for motorized and non-motorized access to the public lands on a network of roads and trails, while protecting natural and cultural resources" (page 2-40). Since this existing Camel Tracks Road is considered an integral road in the travel network on La Bajada Mesa and the objective of the project is to provide protection to the area's natural and cultural resources, the Proposed Action is in conformance with the Taos RMP and consistent with its goals and objectives related to specific, affected resources.

Rationale for Decision

It is appropriate and necessary to implement the Proposed Action for the protection of natural and cultural resources. This action sufficiently meets the purpose and need for the action in a manner which conforms to the 1988 Taos Resource Management Plan, as discussed above.

Public involvement in the preparation of the EA, specifically public comments on the EA and an unsigned FONSI—as discussed in section 5.2 of the EA, provided important information relevant to this decision.

Particularly in response to information related to potential impacts to livestock grazing operations, this decision is to implement the Proposed Action without the fencing component associated with Phase II of the project. The preclusion of this portion of the fence, approximated 2.6 miles in length that would transect Grazing Allotment 544, would alleviate any potential impacts to critical grazing provisions such as access to water sources, movement throughout the allotment, and other operational concerns.

Opportunity to Appeal

Any appeal of this decision must follow the procedures set forth in 43 CFR Part 4. Within 30 days of the decision, a notice of appeal must be filed in the office of the Authorized Officer at Taos Field Office, 226 Cruz Alta Road, Taos, New Mexico 87571. If a statement of reasons for the appeal is not included with the notice, it must be filed with the Interior Board of Land Appeals, Office of Hearings and Appeals, U.S. Department of the Interior, 801 North Quincy St., Suite 300, Arlington, VA 22203 within 30 days after the notice of appeal is filed with the Authorized Officer.

Authorized Officer	Date	

Attachments: Figure 1

Environmental Assessment DOI-BLM-NM-F020-2010-0048-EA

ENVIRONMENTAL ASSESSMENT

Camel Tracks Road Rehabilitation and Fencing Project DOI-BLM-NM-F020-2010-0048-EA

Chapter 1: Introduction

1.1 Background

The BLM Taos Field Office proposes to upgrade approximately 3.3 miles of the heavily eroded and braided Camel Tracks Road on La Bajada Mesa near the community of La Cieneguilla in Santa Fe County, New Mexico. The road extends from County Road 56C and is located in T. 16 N., R. 7 E., Section 24 and T. 16 N., R. 8 E., Sections 18 and 19.

This infrequently maintained road parallels and in some areas traverses the abandoned and historic Route 66 as access to the mesa top and ultimately to Forest Service lands to the south. In its current state, the road is classified as a "primitive" road, which by BLM definition is a route managed for use by four-wheel-drive or high clearance vehicles and does not meet any BLM road design standard.

This largely undeveloped area is close to Santa Fe and recreation use includes hiking, running, dog walking, hunting, target shooting, and appreciation of historic and cultural resources. It overlooks the Galisteo Basin which includes many significant cultural sites. The area includes La Cieneguilla Land Grant, the Camino Real, Route 66, thousands of petroglyphs, and prehistoric Puebloan sites.

There has been a problem with illegal dumping of household items which often get used as shooting targets resulting in additional litter of shotgun shells and bullet casings. There are signs of drug use routinely and at least one occasion of vandalism and attempted looting of cultural resources. Trespassing onto private land from public lands accessed from this segment of road also occurs, and it has been reported that cultural sites on these private lands have been defaced. This illegal activity is concentrated between the main primitive road and the rim of the canyon entering the petroglyph site at the termini of unauthorized routes. The illegal behavior and low management control is creating an undesirable situation for area recreationists.

1.2 Purpose and Need for Action

The project identifies 3.3 miles of road to be upgraded to a BLM "road" standard, which by definition is managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use. The existing road bed is a two-track dirt path that has been used for years by the general public, grazing permittees, the Army National Guard and BLM staff. The existing road bed has never had drainage issues corrected nor has any kind of gravel surfacing been applied. In the worst spots the road is over 100 feet wide.

Due to increased use and subsequent heavy traffic, the road has been widening as vehicles attempt to avoid wet and muddy potholes. The poor soils and the lack of a proper road cross-section and drainage have led to erosion of adjacent soils caused by storm water. Users of the road trying to gain access to the La Bajada Mesa encounter a poorly situated road as soon as the County road 56C ends and the BLM maintenance responsibility begins. The existing road also provides access for illegal dumping, which is prominent along the section of road to be upgraded. The Taos Field Office needs to take action to alleviate these problems.

The purpose of the proposed road upgrade project is to improve and stabilize the road and associated drainage, while eliminating and reclaiming the proliferation of braided routes and reducing opportunities for illegal dumping.

A four wire wildlife fence along the entire road alignment would help control vehicle access to minimize illegal dumping, looting of cultural resources, and off road use. The fence would include strategically place pedestrian walk through access gates and larger gates for access to adjacent private land.

1.3 Land Use Plan Conformance

An objective of the 1988 Taos Resource Management Plan (RMP), as amended, which is the applicable land use plan for the project area, states that the "transportation and access program is to provide for motorized and non-motorized access to the public lands on a network of roads and trails, while protecting natural and cultural resources" (page 2-40). Since this existing Camel Tracks Road is considered an integral road in the travel network on La Bajada Mesa and the objective of the project is to provide protection to the area's natural and cultural resources, as presented above, the Proposed Action is in conformance with the Taos RMP and consistent with its goals and objectives related to specific, affected resources.

This action is consistent with the goals and objectives of the La Cienega Area of Critical Environmental Concern Coordinated Resource Management Plan, prepared in 1995, to provide for the protection and management of the areas important natural and cultural resources.

1.4 Identification of Issues

Based on internal scoping exercise participated by an interdisciplinary team of resource specialists, the following issues have been determined relevant to the analysis of this action:

1.4.1 Soil

• Soil erosion due to surface disturbance from project activities or the continued use and proliferation of routes, if the project is not implemented

1.4.2 Wildlife

• The effect that the proposed project would have on wildlife, including migratory birds

1.4.3 Recreation

• Managing for the current level of public access

1.4.4 Cultural Resources

- Impacts to the National Historic Route 66 and Camino Real de Tierra Adentro National Historic Trail
- Impacts to the area's prehistoric sites

1.4.5 Water Quality

• Impairment of water quality in the Santa Fe River

Chapter 2: Description of Alternatives

2.1 Alternative A: Proposed Action

The Taos Field Office is proposing to rehabilitate a dirt road in the La Cienega ACEC on the La Bajada Mesa near Santa Fe, NM. The road is accessed at mile marker 1.1 of Santa Fe County Road 56C, at which point the non-numbered BLM Camel Tracks road begins at mile post 0.0 and continues south and west to the Forest Service boundary at mile marker 3.3.

The Taos Field Office proposes to correct the road deficiencies in two phases to improve control of storm water, thereby reducing soil loss from the road and adjacent areas. Phase I would be completed first and would rehabilitate the first 0.7 miles of road closest to Santa Fe County Road 56, up to the cattleguard at the boundary of Grazing Allotment 544. Phase II would implement rehabilitation on the remaining 2.6 miles from the cattleguard to the Forest Service boundary. The road would be shaped, drainage ditches defined, culverts installed where applicable and all weather gravel surfacing applied as needed. The usable road way width would be 20 feet, which would meet both the Santa Fe County and BLM standards for two way traffic flow. Excess road surface beyond 20 feet would be restored with native vegetation and blocked from vehicle traffic using physical barriers such as fence or boulders (see below). Re-vegetation would occur through drill seeding with certified weed-free seed with a mixture of blue grama (45%), sideoats grama (15%), galleta (15%), black grama (15%), sand dropseed (5%) and threeawn (5%). If any state or BLM listed noxious weeds are out competing native vegetation after three growing seasons post-seeding, the weeds would be addressed by following the Taos Field Office programmatic treatment plan for weeds.

This project would use large equipment, such as dump trucks, road graders, or backhoes to re-contour the surface and install the all weather surface. Where necessary due to slope or soils, weed free erosion control buffers (e.g., hay bales) would be used upslope to deflect water and downslope to reduce runoff. Construction vehicles would be cleaned prior to site entry and after removal using high pressure wash or steam cleaning to remove plant and soil material. Construction may occur at any time of year, but would be stopped when precipitation warrants avoiding soil erosion.

The project also identifies approximately 3.5 miles of fencing adjacent to and along the southeast side of the roadway to limit both on and off road travel and the subsequent illegal dumping associated with the open access. Fences would be constructed of t-posts with the top three strands consisting of barbed wire and the bottom strand would be of smooth wire. Treated wood posts would be used for h-braces and pedestrian walk-through gates. Three to four pedestrian gates and shoulder parking for up to three vehicles would be designed into the fenceline to allow visitors to park and hike. Vehicle access gates would be installed on spur roads used for authorized administrative uses.

An ongoing partnership with Santa Fe County to help curb illegal dumping along the entire route has proven effective in recent years and will continue. This partnership works in such a way that Santa Fe County provides the fencing material and the BLM provides the labor to install the fencing. The fencing would be installed as funding is acquired and as the partnership with Santa Fe County continues. Recent cooperative projects with the County have resulted in construction of approximately one mile of fence per year. The fencing would be used to limit vehicle travel from widening the road in the future, and the reclaimed road would be planted with native plant material.

In summary, the Proposed Action would address four management objectives for the Taos Field Office:

- 1. To bring the road up to BLM standards,
- 2. help prevent illegal dumping,
- 3. control water runoff and erosion to protect soil health and surface water quality, and

4. protect the historic route 66 that travels the length of the project area and is either within the road bed or within a few hundred feet.

The Taos Field Office anticipates that this project would start in fiscal year 2011 and be completed within 5 years if funds are available. The Taos Field Office is planning to implement this project using available staff, or would contract out the work if internal resources are unavailable.

2.2 Alternative B: No Action

Under the No Action alternative, there would be no maintenance activity on the road surface and no installation of fencing adjacent to the road.

Chapter 3: Affected Environment

The topics presented in the following sections may have impacts, whether negative or beneficial, on the human environment by the Proposed Action or alternatives and, therefore, would be the subject of this Environmental Analysis. The elements bulleted below are not affected by the Proposed Action or alternatives for the reasons stated and would not be discussed further in this document:

- **Riparian/Wetland Vegetation** There are no riparian areas within the project area. Therefore, there would be no impact to riparian or wetland vegetation by the Proposed Action or No Action alternatives;
- Threatened and Endangered Species It is determined that there are no federally listed threatened or endangered animal or plant species likely to be found in or adjacent to the project area. There is no designated critical habitat for any species listed by the U.S. Fish and Wildlife Service within or adjacent to the area. Therefore, it is determined that the Proposed Action or no action alternative would have no adverse affect on federally listed proposed, candidate, threatened or endangered species, or designated critical habitat.
- **Noxious Weeds** Although weeds are present in the area, the project would not impact their density or distribution due to adherence to the Taos Field Office programmatic treatment plan for weeds and by washing of equipment as identified under the Proposed Action.

3.1 Soils

The soils of the road project area include:

- A. Parida gravelly loam, 3 to 10% slopes and Medrano extremely gravelly loam, 5-65% slopes soils that comprise the road area most in need of repair.
- B. Churipa very cobbly sandy loam, 5-15% slopes, which occurs in drainages and will likely require culverts.
- C. Calabasas loam, 1-3% slopes; Delvalle-Urban land complex, 0-2% slopes; Tsinat gravelly loam, 1-6% slopes soils which comprise areas where road expansion has occurred due to low slopes allowing vehicles to drive off road.

The soils rated as Moderately Suited to Well Suited for natural surface roads, though the Medrano soils are Poorly Suited due to slope. The Medrano soil is listed as being Poorly Suited for fencing, due to slope and soil texture. All other soils are identified as Suited to Well Suited for fencing.

3.2 Wildlife

Big game species that could occur in the area include Rocky Mountain Elk (*Cervus elaphus*), Mule Deer (*Odocoileus hemionus*), Mountain Lion (*Felis concolor*), and Black Bear (*Ursus americanus*), although occurrence of these species inside the project area are unlikely due to lack of hiding cover. The habitat provided in the project area is likely utilized by many smaller species of mammals, including chipmunks (*Tamias* spp.), cottontail rabbit (*Sylvilagus floridanus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), porcupine (*Erethizon dorsatum*), raccoon (*Procyon lotor*), rock squirrel (*Spermophilus variegatus*), striped skunk (*Mephitis mephitis*), wood rat (*Neotoma* spp.), and various species of bats (Order Chiroptera). Various amphibians, reptiles and insects also occur inside the project area.

3.2.1 Migratory Birds

An estimated 103 species of migratory birds of special management concern (NMSO 2008) either nest or migrate through the Taos Field Office planning area. Observations in upland habitats have found high avian diversity, especially in woodland habitat types, such as those adjacent to the project area. Seasonal restrictions on removal of vegetation or ground disturbing activities during the migratory bird breeding season (April through September) are imposed where feasible, and if work cannot be avoided during those timeframes, nest searches by a qualified wildlife biologist are conducted in vegetation that may be disturbed during authorized public land activities.

Migratory birds that could be found in the project area include: Turkey Vulture (Cathartes aura), Redtailed Hawk (Buteo jamaicensis), Bald Eagle (Haliaeetus leucocephalus), Golden Eagle (Aquila chrysaetos), American Kestrel (Falco sparverius), Killdeer (Charadrius vociferus), Mourning Dove (Zenaida macroura), Loggerhead Shrike (Lanius ludovicianus), Common Nighthawk (Chordeiles minor), Broad-tailed Hummingbird (Selasphorus platycercus), Ladder-backed woodpecker (Picoides scalaris), Downy Woodpecker (Picoides pubescens), Northern Flicker (Colaptes auratus), Gray Flycatcher (Empidonax wrightii), Say's Phoebe (Sayornis saya), Ash-throated Flycatcher (Myiarchus cinerascens), Cassin's Kingbird (Tyrannus vociferans), Plumbeous Vireo (Vireo plumbeus), Piñon Jay (Gymnorhinus cyanocephalus), Horned Lark (Eremophila alpestris), Violet-green Swallow (Tachycineta thalassina), Northern Rough-winged Swallow (Stelgidopteryx serripennis), Blue-gray Gnatcatcher (Polioptila caerulea), Western Bluebird (Sialia mexicana), Mountain Bluebird (Sialia currucoides), Townsend's Solitaire (Myadestes townsendi), American Robin (Turdus migratorius), American Pipit (Anthus rubescens), Black-throated Gray Warbler (Dendroica nigrescens), Western Tanager (Piranga ludoviciana), Chipping Sparrow (Spizella passerina), Lark Sparrow (Chondestes grammacus), Western Meadowlark (Sturnella neglecta), and Brown-headed cowbird (Molothrus ater).

Two of the species listed above, the Golden Eagle and Piñon Jay are listed as Birds of Conservation Concern in Bird Conservation Region 16 – Southern Rockies/Colorado Plateau (USDI, FWS 2008). In addition, seven documented species are contained in the list of Birds of Management Concern (USDI, FWS 2009a) and include: Golden Eagle, Mourning Dove, Piñon Jay, Horned Lark, Juniper Titmouse, Yellow Warbler, and Common Yellowthroat.

3.3 Recreation

This largely undeveloped area is close to Santa Fe, and recreation use includes hiking, running, dog walking, hunting, target shooting, and appreciation of historic and cultural resources. It overlooks the Galisteo Basin which includes many significant cultural sites. The area includes the Cieneguilla Spanish Land Grant, the Camino Real, Route 66, thousands of petroglyphs, and a pueblo ruin.

As previously discussed, there has been a problem with illegal dumping of household items, which, in turn, often get used as shooting targets, resulting in additional litter of shotgun shells and bullet casings.

There are signs of drug use routinely and at least one occasion of vandalism and attempted looting of cultural resources. This illegal activity is concentrated between the main primitive road and the road along the rim of the canyon entering the petroglyphs site at the terminus of unauthorized routes. Although rich in recreational opportunities and steeped in history, the depreciative behavior and low management control is sure to make this area somewhat undesirable.

3.4 Cultural Resources

The proposed project is located just north and west of the La Cienega Area of Critical Environmental Concern (ACEC), which was designated in the 1988 Taos Resource Management Plan. La Cienega ACEC contains important prehistoric Puebloan village sites, agricultural features and petroglyphs, and historic sites including structures, petroglyphs and intact segments of the Camino Real de Tierra Adentro National Historic Trail.

The project area has been inventoried for archaeological resources through past projects relating to the New Mexico Army National Guard Camel Tracks training area. No sites have been recorded within the project area. The Camino Real de Tierra Adentro is located parallel to the south of the existing road. The existing road follows the route of the old Route 66 road. Portions of the old road can be seen along the project area adjacent to the existing road, but a good deal of the old road has been obliterated by many years of vehicular travel along the braided, non-maintained route.

3.5 Water Quality

The proposed project is located in the Santa Fe River watershed. The river near the project site is primarily an effluent system – flow is delivered from the effluent of the Santa Fe Sewage Treatment Plant. Impairments listed on the 2010-2012 CWA 303d list developed by the New Mexico Environment Department are eutrophication and dissolved oxygen, issues primarily associated with the effluent nature of the river rather than land use practices. The river is also subject to high pulse flows during summer rain storms that can carry large sediment loads from adjacent arroyos.

Chapter 4: Environmental Effects

4.1 Direct and Indirect Effects

4.1.1 Alternative A: Proposed Action

4.1.1.1 Soil

Implementation of the Proposed Action would reduce direct and indirect impacts to soil over the long term. Direct impacts from vehicles would be reduced by limiting the expansion of road surfaces. Indirect impacts from water erosion of soils would decrease over the long term as surfaces are regraded to reduce water power and road surface areas are reduced and re-vegetated. There may be some short-term impacts resulting from construction activities during implementation of this project, primarily on the Medrano soil areas.

4.1.1.2 Wildlife

Wildlife species inhabiting the project area, such as amphibians, reptiles, insects and small mammals (e.g., rodents), could be temporarily displaced during the implementation of the Proposed Action due to human disturbance during fence construction and road rehabilitation activities. Any removal of

vegetation would be expected to result in short-term impacts on wildlife species that utilize the immediate area by temporarily reducing cover and forage.

The Proposed Action is expected to result in a long-term beneficial effect to wildlife by reducing off-road vehicle traffic impacts to the immediate and adjacent area, thereby improving vegetation composition and structure and forage diversity.

Because the Proposed Action would be implemented over time as funding is available, work would be completed in phases, and only a percentage of habitat and cover would be disturbed and/or removed throughout the project area. The Proposed Action would not result in a significant reduction in available habitat and/or foraging opportunities in the general vicinity. While short-term reduction in available habitat are unavoidable when undertaking the Proposed Action, native vegetation would return and, if necessary, native seed would be applied where required to rehabilitate denuded soils within the project area. The short-term effects would be outweighed by the long-term benefits of a healthier and more ecologically diverse ecosystem protected from off-road vehicle traffic.

4.1.1.2.1 Migratory Birds

The Proposed Action could temporarily disturb migratory birds in the area of active fence construction or road rehabilitation activities. Because the project is being conducted in phases and is relatively small, perch, nesting, and foraging habitat would still be available in the adjacent area throughout the duration of the project. While short-term reductions in available habitat are unavoidable when undertaking the Proposed Action, native vegetation would be restored where the road has expanded, and protected from further off-road vehicle traffic, thereby increasing biological diversity within the project area. Thus, the short-term effects would be outweighed by the long-term benefits of a healthier ecosystem.

To avoid direct impacts to migratory birds, non-native removal and planting activities would be scheduled to take place outside of the migratory bird breeding season (April 15 – September 15) when feasible, and if work cannot be avoided during those timeframes, nest searches by a qualified wildlife biologist would be conducted in vegetation that may be disturbed during authorized activities. Therefore, the Proposed Action has the potential to have a negative effect upon individual birds and/or the nesting habitat of nesting birds, but not of their eggs or young; however, it is unlikely there would be a notable impact to the populations of species of conservation concern.

Golden Eagles might nest within the canyon adjacent to the project area, which could become occupied as early as February. To avoid potential impacts to the Golden Eagle, monitoring would be implemented on any nest site(s) within one-half mile of project activities for negative project-related effects (e.g., flushing from the nest or alarm calls). If disturbance is noted, project-related activities would cease until fledging of young has been completed.

It is possible that migrating or wintering Bald Eagles could use the project area for foraging. No direct or indirect impacts to nesting or breeding habitat would be associated with the Proposed Action; however, foraging habitat may be impacted in the short-term. If present within the project area, Bald Eagles would most likely avoid the active construction area, and foraging opportunities may be temporarily reduced. However, the re-establishment and protection of native vegetation is expected to increase both biological diversity and habitat structure within the area. Therefore, there could be short-term negative impacts and long-term positive impacts to the Bald Eagle associated with the Proposed Action if the species is present.

In addition, if a Bald or Golden Eagle is observed within one-quarter mile of active construction in the morning before activity starts, or arrives during breaks in activity, all activities would suspend until the bird leaves of its own volition. If a Bald or Golden Eagle arrives during construction activities, or is observed more than one-quarter mile from the active construction site, activities would not be interrupted.

4.1.1.3 Recreation

This alternative maintains access to all areas and all authorized activities. It improves safety of visitors by controlling some vehicle access and indirectly limits depreciative and illegal behavior, thereby decreasing conflict with legitimate recreation. Designing and maintaining the road would decrease soil and vegetative loss and use of gravel helps to maintain the undeveloped setting. Fencing and closing vehicle access to the rim of the canon would protect historic and cultural resources from looting and vandalism, help limit drug use and illegal dumping, and is consistent with long-term management of the area for recreation. The results of moderate improvement of the road and fencing would enhance public use for recreation.

4.1.1.4 Cultural Resources

The entire project area has been inventoried for archaeological resources in previous years (Taos Cultural Resources Reports 96-16, and 2001-12). No sites were recorded within the area of the proposed project. So, the proposed project would have no effect on archaeological sites.

The proposed action would have a positive effect on the Camino Real, which parallels the road less than a mile to the southwest. Fencing and gating along the south side of the road would reduce vehicular access to this portion of the mesa top and, therefore, would help the BLM to manage and protect the historic road. This fence line and gating would also restrict vehicle access to the rim of the Santa Fe River canyon where thousands of petroglyphs are located. The BLM has investigated reports of removal of small rocks with petroglyphs. Intact portions of the Route 66 road would be avoided by construction activities. A well maintained road would make it possible for the public to cross the mesa on the old Route 66 alignment. Future interpretation along the route could offer a link to the past when travel by automobile was a little more challenging than today.

4.1.2 Alternative B: No Action

4.1.2.1 Soils

Under the No Action alternative, both direct and indirect soil erosion issues would continue in both the short and long term. The current road alignment collects and focuses water, resulting in indirect effects from surface soil scour and gullying. Direct soil exposure to erosion would likely increase as a result of continued expansion of the road surface as vehicles avoid rutted and muddy stretches.

4.1.2.2 Wildlife

Short-term impacts to wildlife resources would not occur under the No Action alternative. Long-term adverse effects on breeding and foraging species, however, are gradual and difficult to quantify. Detrimental impacts to wildlife could result from long-term reduction in ecological processes from off-road vehicles that damage soil and vegetation, increase potential encroachment of non-native vegetation species, increase soil loss and erosion, reduce habitat niches and potentially increase fire hazards. These impacts could result in lowered populations of wildlife species, reductions in available habitat, and decreased forage capacity and diversity.

4.1.2.2.1 Migratory Birds

The No Action alternative would not result in any short-term impacts to migratory birds. However, long-term impacts could result through continued habitat degradation and the associated decrease of native

vegetation species within the project area from increased off-road vehicle traffic. This impact could particularly negatively affect insectivorous and ground-nesting birds, which are already rare within the project area.

4.1.2.3 Recreation

This alternative would allow continued degradation of soil and vegetation which impacts settings for recreation. Without limiting vehicle use to a small area, it leaves open more potential for vandalism of cultural resources. Recreation users are likely to be displaced or choose safer areas to visit. The result of the No Action alternative would be continued conflict between users and degradation of resources.

4.1.2.4 Cultural Resources

This alternative would allow the continued degradation of the old Route 66 route. This alternative would also make it more difficult for people interested in Route 66 to actually travel along the route across the Caja del Rio Plateau.

The No Action alternative could also affect the cultural resources between the road and the Santa Fe River. Vehicular access would continue to be available to the mesa top above the Santa Fe River, where petroglyphs have been removed and vandalized. As the Camel Tracks Road continues to deteriorate, people may find other routes to cross the mesa in their vehicles. These newly formed and expanded routes could possibly disturb archaeological sites including the Camino Real.

4.1.2.5 Water Quality

The continued soil erosion that would result from the No Action alternative may result in long-term chronic impairment of water quality in the Santa Fe River due to sedimentation.

4.2 Cumulative Effects Analysis

A cumulative impact, as defined in 40 CFR 1508.7, is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other action.

4.2.1 Cumulative Actions

4.2.1.1 Past and Present Actions

The project area has been used for centuries as a thoroughfare to and from the City of Santa Fe. Prior to European arrival, Puebloan cultures used the mesa tops to develop agricultural plots.

The BLM currently allows use for recreational activity, livestock grazing, and training of a National Guard unit.

4.2.1.2 Reasonably Foreseeable Actions

In the foreseeable future, the BLM will allow for continuation of current activities. There is interest in developing wind or solar energy on the mesa, but it is unclear whether that would be economical or if the Taos Field Office would approve a facility. As yet, no alternative energy rights-of-ways have been filed. The Taos Field Office is completing a resource management plan that may change some aspects of management in the project area, though no decision has been made.

BLM may provide interpretive signs and additional management presence in the form of patrols, orientation, and regulatory signs in or near the project area.

4.2.2 Cumulative Effects

4.2.2.1 Soils

The current and past impacts to soils will continue to reduce vegetative cover resulting in degraded soils. There may be increase compaction and soil loss due to increased vehicle traffic in the area caused by population growth in the Santa Fe metro region. The Proposed Action would mitigate the impacts from past, current, and future actions by reducing the risk of soil erosion through re-vegetation of exposed soil surfaces.

4.2.2.2 Wildlife

Restoration projects are taking place in nearby riparian zones within fifty miles of the project area which benefit all forms of wildlife, from aquatic to terrestrial. Increasing herbaceous, shrub, and tree cover provides for increased forage opportunities and habitat for terrestrial species. However, the removal of large, continuous patches of non-native vegetation from the Galisteo River basin could reduce available habitat for some terrestrial species that relied on the cover of dense non-native vegetation.

Bank stabilization projects taking place on the Santa Fe River near the project area could result in improved water quality due to the reduction in sediment discharged into the system during high-volume flow events. In addition, maintenance and repair of the old U.S. Highway 66, which runs along the north side of the Santa Fe River canyon, could also decrease upland-generated sediment inputs to the Santa Fe River.

The project would temporarily add to a small decrease in the amount of habitat available to wildlife during construction and rehabilitation activities. However, over the long term the project would increase the quality of habitat to wildlife species due to the increase in vegetation structural diversity, habitat niches, biodiversity, and forage diversity from protecting a larger area from off-road vehicle traffic.

4.2.2.2.1 Migratory Birds

The restoration and enhancement projects that are currently, have, or are planned to take place near the project area could benefit migratory birds by supplying additional habitat diversity, structure, and foraging opportunities. In addition, the establishment of riparian vegetation on currently denuded stretches of the Santa Fe River would increase habitat availability and could improve the migratory corridor conditions. However, the non-native vegetation removal that is taking place on the Pueblo of Santa Domingo has the potential to decrease available stopover, foraging, nesting, and breeding habitat for migratory birds until replacement habitat develops.

The project would temporarily add to a decrease in the amount of habitat available to migratory birds during fence construction and road rehabilitation activities. However, over the long term the project is expected to increase the quality of migratory bird habitat due to the increase in structural diversity, habitat niches, biodiversity, and foraging opportunities.

4.2.2.3 Recreation

As recreation continues to increase along with population growth and development, visitors will more frequently encounter other users leading in a moderate decline in opportunities for solitude.

4.2.2.4 Cultural Resources

Cumulative impacts to cultural resources would continue to degrade the Route 66 roadway and adjacent resources under the No Action alternative. The Proposed Action would lesson impacts to remaining intact portions of Route 66 by containing vehicular travel to a twenty-foot-wide road, instead of the braided, multiple roads that exist now. The fencing would likely lesson negative impacts to the Camino Real de Tierra Adentro, and the archaeological sites and associated petroglyphs located along the Santa Fe River canyon.

4.2.2.5 Water Quality

Cumulative impacts to water quality, including chronic turbidity and sedimentation, would be exacerbated by the No Action alternative, which would not address increases in stormwater runoff caused by reduced vegetative cover and exposed soil. The Proposed Action would mitigate water quality impairment by restoring vegetative cover and soil stability

Chapter 5: Consultation and Coordination

5.1 Summary of Consultation and Coordination

Mike Taylor, with the National Park Service, was consulted on-site regarding Historic Route 66. Design features incorporated in the Proposed Action to protect this historic resource were developed as part of this consultation effort.

5.2 Public involvement

This environmental assessment was made available for public review at BLM New Mexico's website (http://www.blm.gov/nm/st/en/fo/Taos_Field_Office.html) from December 1, 2010 to December 30, 2010. The site solicited public comments on the EA and an unsigned Finding of No Significant Impact determination. Two comment letters were received expressing concerns primarily related to the action's potential impacts to livestock grazing operations within Allotment 544. These comments were adequately responded to with slight modifications to this EA and addressed in the Decision Record for this action.

5.2 List of Preparers

Paul Williams, Archaeologist
Valerie Williams, Wildlife Biologist
Tami Torres, Recreation Planner
Herbert Chavez, Engineer
Brad Higdon, Planning and Environmental Coordinator
Sarah Naranjo, Realty Specialist
Jacob Young, Range Specialist

Chapter 6: References

Deyloff, Glenda, Lonyta Vicklund, and Cherie L. Scheick, 1994. *An Archaeological Survey of 570 Acres North of Cieneguilla, NM, Santa Fe County.* Southwest Archaeological Consultants, Inc., Santa Fe, NM.

Gerow, P.A., and W.H. Doleman, 2002. Across The Caja Del Rio Plateau: Hunters and Farmers in the Northern Rio Grande: A Class III Inventory of the NMARNG Camel Tracks Training Site, Santa Fe County, New Mexico, Office of Contract Archaeology, University of New Mexico, Albuquerque.

New Mexico Environment Department, Surface Water Quality Bureau. 2010. 2010 – 2012 State of New Mexico Clean Water Act $\S303(d)/\S305(b)$ Integrated Report. Available at: ftp://ftp.nmenv.state.nm.us/www/swqb/303d-305b/2010/2010-2012NMReport.pdf

United State Department of Agriculture, Soil Conservation Service. *Soil Survey of Santa Fe Area, New Mexico*. Available at: http://soildatamart.nrcs.usda.gov